

Project Summary

Project Title: Conservation Guidance for Species in Greatest Need of Conservation (SGNC).

Applicant information: Illinois Natural History Survey

Principle Investigators: Leon C. Hinz Jr.

Purpose and Objectives: The primary purpose of this project is to develop consistent conservation guidance for SGNC for implementation of the Illinois Wildlife Action Plan (IWAP) and associated programs by IDNR staff and their conservation partners.

Objective 1. Engage IDNR staff and other stakeholders to identify conservation guidance needs.

Objective 2. Develop a consistent process for assembling conservation guidance documents for state-listed species that complements the IWAP.

Objective 3. Develop a series of conservation guidance documents for SGNC that are frequently subject to ITA requests.

Objective 4. Establish required elements for conservation plan submitted to IDNR for Incidental Take Authorization (ITA) and develop instructions for applicants to ensure elements are delivered.

Objective 5. Complete project reporting requirements.

Proposed Grant Period: October 1, 2014 – September 30, 2016

Amount Requested (Planning Grant): IDNR will provide \$60,034 in cash match during the project period.

	Total Federal	Total Non-Federal	Total Cost
Year One Funding	\$ 39,740	\$ 30,017	\$ 69,757
Year Two Funding	\$ 39,741	\$ 30,017	\$ 69,758
Total Funding	\$ 79,481	\$ 60,034	\$139,515

States and Partners Involved: Illinois Department of Natural Resources, Illinois Natural History Survey

Summary Statement: This project will build upon existing procedures to define a process for developing and providing conservation guidance for SGNC that is consistent with the goals and objectives of the IWAP for use by IDNR staff and their conservation partners. We will further establish required elements for conservation management plans associated with projects that impact T&E species and produce a set of conservation guidance documents for selected species.

Conservation Guidance for Species in Greatest Need of Conservation.

Project Number:

Need:

Information within and associated with the Illinois Wildlife Action Plan (IWAP) includes locations, distributions, and stressors for Species in Greatest Need of Conservation (SGNC) and their habitats (State of Illinois 2005). This type of information can be used to assess potential impacts to SGNC from proposed activities that occur on the habitats that they use, and to assist with conservation planning for these species of interest. While two major objectives for SGNC are to maintain populations at “historic locations where suitable habitat persists or can be restored” and, to increase the number of populations within the state (State of Illinois 2005, pages 40- 42) there is little formal guidance on obtaining these objectives.

The Illinois Department of Natural Resources (IDNR) is responsible for providing guidance on avoidance and minimization of impacts to State-listed species, all of which are SGNC (520 ILCS 10/11). Potential project developers consult with the IDNR Office of Realty and Environmental Planning (OREP), who reviews the project for potential impacts to State-listed species (ILL. ADM. CODE. Conservation § 1075). OREP may conclude there will be no impact, suggest measures to avoid impacts, or in the case of unavoidable impact recommend developers apply for Incidental Take Authorization (ITA). For ITA, project developers or private consultants prepare a conservation plan including actions to avoid, minimize, and mitigate impacts to the State-listed species, which is submitted to the IDNR Office of Resource Conservation (ORC) for review (ILL. ADM. CODE. Conservation § 1080). Developers, private consultants, OREP, and ORC have different perspectives, goals, resources, and procedures relative to conservation planning making this process complex and, at times, contentious.

The goal of the Incidental Take Authorization process, simply put, is to maintain and increase the populations of species of interest. Given this common goal the IWAP and the ITA process have the potential to be more closely coordinated. Under Ill. Adm. Code 1080.10(a)(1)(B) – Incidental Taking of Endangered or Threatened Species, the

IDNR is required to “...provide biological data in the Department’s possession of the affected species...” upon request of an ITA applicant. The Illinois Wildlife Action Plan (IWAP) contains this type of information for Species in Greatest Need of Conservation (SGNC), including all State-listed species, by documenting their status, trends in the populations, and stressors. This extensive compilation of species information in the IWAP is thus highly relevant to ITA but has yet to be strategically assimilated into routine actions.

The IDNR has not developed specific guidelines for avoidance, minimization, mitigation, and management of individual species making the current consultation and ITA process burdensome and inconsistent. Species-specific conservation guidance documents will rectify this shortcoming and provide common ground for developers, consultants, OREP, and ORC to work together using current scientific knowledge. This pilot effort will streamline and standardize the application and review process for ITAs, serve as a useful tool for all stakeholders, better incorporate the IWAP into conservation planning procedures, and provide feedback to the IWAP. The conservation guidance documents proposed here would include management recommendations for ITAs that would also serve as conservation actions for SGNC that could be included into Illinois’ revised Wildlife Action Plan. During the pilot effort, five conservation guidance documents will be created that target different taxonomic groups and species frequently subject to ITA requests.

This project addresses existing needs for management and restoration of Illinois Species in Greatest Need of Conservation (TRACS Level 1 [Resource Management Needs], Level 2 [Management Decision needs], Level 3 [fish, wildlife, and habitat planning]) by providing consistent written conservation guidance to be used by IDNR staff and their conservation partners.

Purpose and Objectives:

The primary purpose of this project is to develop consistent conservation guidance for SGNC for implementation of the Illinois Wildlife Action Plan and associated programs by IDNR staff and their conservation partners.

Objective 1. Engage IDNR staff and other stakeholders to identify conservation guidance needs.

Objective 2. Develop a consistent process for assembling conservation guidance documents for state-listed species that complements the IWAP.

Objective 3. Develop a series of conservation guidance documents for species that are frequently subject to ITA requests.

Objective 4. Establish required elements for conservation plans submitted to IDNR for Incidental Take Authorization (ITA) and develop instructions for applicants to ensure elements are delivered.

Objective 5. Complete project reporting requirements.

Anticipated Outcomes and Benefits:

Expected outputs associated with this project include:

1. Report on the different stakeholder's perspectives and approaches to conservation planning.
2. Five species-specific avoidance, minimization, and mitigation guidelines documents (similar to those developed by Wisconsin DNR) to be posted online.
3. Conservation actions for five SGNC that can be included in Illinois' revised Wildlife Action Plan. [includes research and monitoring needs]
4. A process that can be applied to other State-listed species and SGNC.
5. Template and instructions for preparing conservation plans and using conservation guidance documents for ITA applicants to be posted online.

Approach:

This project directly addresses Species Management Planning (TRACS Action Level 1 [Planning], Action Level 2 [Species and habitat management planning], Action Level 3 [Species management planning] and Listed Species Recovery Planning (TRACS Action Level 1 [Planning], Action Level 2 [Species and habitat management planning], Action Level 3 [listed species recovery planning]) by developing guidance documents for assistance with management and recovery of Illinois Species in Greatest Need of Conservation.

Objective 1. Engage IDNR and other stakeholders to identify conservation guidance needs.

We will engage project developers, private consultants, OREP, and ORC to gain an understanding of their perspectives, goals, approaches, and needs as they pertain to conservation guidance. We will review documents prepared by each group in the conservation planning process and conduct semi-structured interviews to understand the process used by stakeholders' in conservation planning. We will use discourse analysis to compare the information being used for conservation planning and to identify the ways stakeholders conceptualize conservation planning.

Job 1. Plan and prepare for stakeholder research.

We will identify stakeholders and select an appropriate sample that will best illustrate the range of interests. We will then obtain approval for research with human subjects from the University of Illinois Institutional Review Board (IRB). We will then secure consent and cooperation of selected stakeholders by December 2014 (see project schedule).

Job 2. Review conservation planning documents and conduct discourse analysis. Documents will be collected from stakeholders, such as Biological Opinions, Conservation Plans, and Incidental Take Authorization contracts. These documents will be coded using grounded theory to extract themes and meanings (Gee 1999, Strass and Corbin 1998). Themes will be compared across stakeholder groups by December 2015 (see project schedule).

Job 3. Conduct interviews of stakeholders and analyze transcripts using discourse analysis. We will use semi-structured interviews to elicit information about the conservation planning process from different stakeholder groups. Transcripts will be coded using grounded theory to extract themes and meanings (Gee 1999, Strass and Corbin 1998). Themes will be compared across stakeholder groups by December 2015 (see project schedule).

Objective 2. Develop a consistent process for assembling conservation guidance documents for conservation of state-listed species that complements the IWAP.

Information from objective one will be used to identify elements to be included in conservation guidance documents. In addition, literature and IWAP will be reviewed for SGNC information including the general natural history, conservation status and existing and potential threats to be included in conservation guidance documents. Details on management guidelines and avoidance measures based on the available literature will also be included in the documents. The Wisconsin Department of Natural Resources (2014) has produced species guidance documents that will serve as a model.

Job 4. Identify elements necessary for conservation guidance documents. We will use information from objective one (identifying conservation guidance needs). We will review resources used by different stakeholders in conservation planning as well as information on SGNC in IWAP relevant to ITA. Elements necessary for conservation guidance documents will be described by September 2015 (see project schedule).

Job 5. Develop a template with instructions for conservation guidance documents.

We will compile elements from Job 4 into an easy to use template. We will then develop a detailed protocol of steps to be taken and resources to be considered in creating conservation guidance documents by September 2015 (see project schedule).

Objective 3. Develop a series of conservation guidance documents for species that are frequently subject to ITA requests.

Using the procedure developed in objective two, we will create conservation guidance documents for five State-listed SGNC. We will select five species to produce conservation guidance documents for across different taxonomic groups that are frequently subject to ITA requests. The conservation guidance documents will be made available on the Illinois Wildlife Action Plan and ITA webpages. Using the information compiled for conservation guidance documents, we will conduct a formal update of Appendices I-III for five selected SGNC and their habitats.

Job 6. Select five target species for conservation guidance documents

We will identify species frequently subject to ITA such as the Illinois Chorus Frog (*Pseudacris streckeri illinoensis*), King Rail (*Rallus elegans*), and Yellowheaded Blackbird (*Xanthocephalus xanthocephalus*). Five species will be selected to maximize taxonomic diversity by December 2014 (see project schedule).

Job 7. Produce five conservation guidance documents.

We will create five species-specific conservation guidance documents for SGNC using the procedure developed in objective two and the species identified in Job 6. Stakeholders and species experts will be given an opportunity to review, comment, and contribute to conservation guidance documents prior to publication by September 2015 (see project schedule).

Objective 4. Establish desired elements for conservation plans submitted to IDNR for Incidental Take Authorization (ITA) and develop instructions for applicants to ensure elements are delivered.

The Illinois Endangered Species Act and corresponding Administrative Code dictate the minimum requirements of a conservation plan and the ITA review process. In addition, there are elements that can improve the conservation plan and streamline the ITA process. These requirements will be organized into a template that is compatible with the conservation guidance documents produced in objective three.

Job 8. Review ITA related regulations and documents.

We will review Illinois Endangered Species Protection Act and the corresponding Administrative Code to identify conservation planning elements required by ITA. In addition, we will incorporate the findings of objective one to correct for potential miscommunications and shortcomings of the existing conservation planning process. This review will be conducted in the first quarter of the project and updated in the last two quarters of the project (see project schedule).

Job 9. Produce conservation plan template and instructions.

We will produce a template and detailed instructions to aid ITA applicants in preparation of a sound conservation plan. Special attention will be given to the findings in objective one. This conservation plan template and instructions for its use will be published on the IDNR ITA webpage by September 2016 (see project schedule).

Objective 5. Complete project reporting requirements.

Job 10. Complete final report to FWS and IDNR.

Reporting requirements include an annual and a final report. These reports will consist of information on stakeholder perspectives, a protocol for the development of conservation guidance documents, five completed conservation guidance documents, and a template and instructions for conservation plan preparation. Conservation guidance documents and instructions for conservation plan preparation will be completed by September 2016 (see project schedule).

Useful life:

Not applicable to this project.

Geographic Location:

This project will be completed by INHS staff in Springfield with the assistance of IDNR in Springfield.

Personnel:

The following personnel from IDNR Office of Resource Conservation (ORC), One Natural Resources Way, Springfield, IL 62702 will manage this project:

Ann Marie Holtrop, Acting Director
IDNR – Division of Natural Heritage & Watershed Protection Section
Phone: (217) 785-4325
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Additional personnel involved in this project at the same location include:

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Illinois Natural History Survey
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Bridget Henning
IDNR – Natural Heritage Resident
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Jenny Skufca, Endangered Species Program
IDNR – Division of Natural Heritage
Phone: (217) 557-8243
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Program Income:

Not applicable to this project. No income will be generated through these efforts.

Budget: Year 1

PROJECT BUDGET	Year 1		
Expense Line Item	Federal Request	NonFederal Match	Total
SALARIES & WAGES			
Professional	\$21,000	\$21,000	\$42,000
Non-student hourly	\$0		\$0
Total Salaries & Wages	\$21,000	\$21,000	\$42,000
FRINGE BENEFITS			
Professional @ 42.94%	\$9,017	\$9,017	\$18,034
Non-student hourly @ 7.79%	\$0	\$0	\$0
Total Fringe Benefits	\$9,017	\$9,017	\$18,034
Total Salaries, Wages, & Fringe Benefits	\$30,017	\$30,017	\$60,034
TRAVEL			
Out of state			\$0
In state	\$2,200		\$2,200
Foreign			\$0
Total Travel	\$2,200	\$0	\$2,200
MATERIALS & SUPPLIES - General	\$450		\$450
Publication Fees (reprints/page charges)			\$0
Total Materials & Supplies	\$450	\$0	\$450
CONTRACTUAL SERVICES - General	\$450		\$450
Total Contractual Services	\$450	\$0	\$450
TELECOMMUNICATION SERVICES			\$0
EQUIPMENT (each item \$5000+)			\$0
Total Direct Costs	\$33,117	\$30,017	\$63,134
Modified Total Direct Costs (MTDC)*	\$33,117	\$30,017	\$63,134
F&A-Sponsor (20% of Request)	\$6,623		\$6,623
F&A-UIUC (58.6% of Match) On Campus		\$0	\$0
Unrecovered F&A (20% vs. 24%) Off Campus			\$0
F&A-UIUC (24% of Match) Off Campus			\$0
Total Proposed Project Budget	\$39,740	\$30,017	\$69,757
Total Match Percentages	56.9692%	43.0308%	

Budget: Year 2

PROJECT BUDGET	Year 2		
Expense Line Item	Federal Request	NonFederal Match	Total
SALARIES & WAGES			
Professional	\$21,000	\$21,000	\$42,000
Non-student hourly	\$0		\$0
Total Salaries & Wages	\$21,000	\$21,000	\$42,000
FRINGE BENEFITS			
Professional @ 42.94%	\$9,018	\$9,017	\$18,035
Non-student hourly @ 7.79%	\$0	\$0	\$0
Total Fringe Benefits	\$9,018	\$9,017	\$18,035
Total Salaries, Wages, & Fringe Benefits	\$30,018	\$30,017	\$60,035
TRAVEL			
Out of state			\$0
In state	\$2,200		\$2,200
Foreign			\$0
Total Travel	\$2,200	\$0	\$2,200
MATERIALS & SUPPLIES - General	\$450		\$450
Publication Fees (reprints/page charges)			\$0
Total Materials & Supplies	\$450	\$0	\$450
CONTRACTUAL SERVICES - General	\$450		\$450
Total Contractual Services	\$450	\$0	\$450
TELECOMMUNICATION SERVICES			\$0
EQUIPMENT (each item \$5000+)			\$0
Total Direct Costs	\$33,118	\$30,017	\$63,135
Modified Total Direct Costs (MTDC)*	\$33,118	\$30,017	\$63,135
F&A-Sponsor (20% of Request)	\$6,623		\$6,623
F&A-UIUC (58.6% of Match) On Campus		\$0	\$0
Unrecovered F&A (20% vs. 24%) Off Campus			\$0
F&A-UIUC (24% of Match) Off Campus			\$0
Total Proposed Project Budget	\$39,741	\$30,017	\$69,758
Total Match Percentages	56.9698%	43.0302%	

Budget: Total

PROJECT BUDGET Expense Line Item	Project Totals		
	Federal Request	NonFederal Match	Total
SALARIES & WAGES			
Professional	\$42,000	\$42,000	\$84,000
Non-student hourly	\$0	\$0	\$0
Total Salaries & Wages	\$42,000	\$42,000	\$84,000
FRINGE BENEFITS			
Professional @ 42.94%	\$18,035	\$18,034	\$36,069
Non-student hourly @ 7.79%	\$0	\$0	\$0
Total Fringe Benefits	\$18,035	\$18,034	\$36,069
Total Salaries, Wages, & Fringe Benefits	\$60,035	\$60,034	\$120,069
TRAVEL			
Out of state	\$0	\$0	\$0
In state	\$4,400	\$0	\$4,400
Foreign	\$0	\$0	\$0
Total Travel	\$4,400	\$0	\$4,400
MATERIALS & SUPPLIES - General	\$900	\$0	\$900
Publication Fees (reprints/page charges)	\$0	\$0	\$0
Total Materials & Supplies	\$900	\$0	\$900
CONTRACTUAL SERVICES - General	\$900	\$0	\$900
Total Contractual Services	\$900	\$0	\$900
TELECOMMUNICATION SERVICES	\$0	\$0	\$0
EQUIPMENT (each item \$5000+)	\$0	\$0	\$0
Total Direct Costs	\$66,235	\$60,034	\$126,269
Modified Total Direct Costs (MTDC)*	\$66,235	\$60,034	\$126,269
F&A-Sponsor (20% of Request)	\$13,246		\$13,246
F&A-UIUC (58.6% of Match) On Campus		\$0	\$0
Unrecovered F&A (20% vs. 24%) Off Campus			\$0
F&A-UIUC (24% of Match) Off Campus			\$0
Total Proposed Project Budget	\$79,481	\$60,034	\$139,515
Total Match Percentages	56.9695%	43.0305%	

Budget narrative:

Salaries and Wages: We request staff salary equivalent to one half-time time research scientist for two full years to work with IDNR staff in developing conservation guidance documents for Species in Greatest Need of Conservation for the Illinois Wildlife Action Plan.

Fringe Benefits: We request \$18,035 in fringe benefits in accordance with those budgeted for wages. Fringe benefits will be paid at a rate of 42.94% for Professional staff; rates have been negotiated by the University of Illinois Urbana/Champaign.

Travel: We request a total of \$4,400 to reimburse staff for expenses associated with travel to meet with conservation planning stakeholders to conduct semi-structured interviews (Job 3) and to attend meetings to learn about species conservation to contribute to guidance documents (Job 7) at ten locations throughout Illinois.

Materials and Supplies: We request a total of \$900 to provide support for consumable project supplies such as electronic storage media, printer ink, and high quality printer paper to facilitate communication with IDNR staff and other stakeholders during project activities.

Contractual Services: We request \$900 for contractual services for software licensing over the project period.

Equipment: We request no funds for equipment.

Facilities and Administration Costs: We request \$13,246 to offset facilities and administrative costs at the rate of 20% of direct costs. Rates have been negotiated by the University of Illinois at Urbana/Champaign.

Cost Share: Additional salary and fringe benefits to support one half-time research scientist for two full years on this project will be provided by IDNR in the form of cash from The Wildlife Protection Fund, and serve as cost share.

Multipurpose Projects:

Not applicable to this project.

Relationship to Other Grants:

This work will build on the work and achievements of other grants through inclusion of biological findings or specific conservation techniques in conservation guidance documents. Suitable habitat characteristics and areas for the Illinois chorus frog were identified as part of the grant "Strategies for recovery of an amphibian and a reptile

inhabiting sand areas in Mason and Tazewell Counties” (T-42-R-1). This information will be incorporated into the conservation guidance document for this species in terms of areas and habitats to avoid impacting and where mitigation activities will be most effective. Different habitat mitigation techniques for the Illinois chorus frog were compared in the grant: “The Illinois chorus frog (*Pseudacris illinoensis*) and wetland mitigation: What has worked?” (T-45-D1). Successful techniques were recommended and will be used in conservation guidance documents as mitigation recommendations. Efforts to create and improve Illinois chorus frog habitat on public and private land were supported by the grant: “Habitat Conservation Initiative for the Illinois Chorus Frog (*Pseudacris streckeri illinoensis*): Phase I” (T-62-D1). The approach outlined in this grant will be incorporated in the conservation guidance document for this species as an action that can be taken for habitat improvement and creation. In general, past grants have provided SGNC data to the Natural Heritage Database; this information will be included in conservation guidance documents.

Project Schedule:

Job	10/14 – 12/14	1/15 – 3/15	4/15 – 6/15	7/15 – 9/15
Objective 1				
Job 1	X			
Job 2		X	X	X
Job 3		X	X	X
Objective 2				
Job 4	X	X	X	X
Job 5	X	X	X	X
Objective 3				
Job 6	X			
Job 7				
Objective 4				
Job 8	X	X	X	
Job 9	X	X		
Objective 5				
Job 10				

Job	10/15 – 12/15	1/16 – 3/16	4/16 – 6/16	7/16 – 9/16
Objective 1				
Job 1				
Job 2	X			
Job 3	X			
Objective 2				
Job 4				
Job 5				
Objective 3				
Job 6				
Job 7	X	X	X	X
Objective 4				
Job 8			X	X
Job 9			X	X
Objective 5				
Job 10		X	X	X

General:

The project statement describes a need consistent with the State Wildlife Grants (SWG) program; states a purpose and sets objectives, both of which are based on the need; uses a planned approach, appropriate procedures, accepted principles of research, and is cost effective.

Compliance:

The IDNR will use its CERP (Comprehensive Environmental Review Process) as a tool to aid the Department in meeting NEPA compliance for the project outlined under this grant proposal. It is the Department's policy to require CERP applications for all land disturbing activities unless those activities are covered by CERP exemptions.

All planned activities will also be in compliance with the Endangered Species Act. All determinations and documentation will be in accordance with the current established U.S. Fish and Wildlife Service protocols for section 7.

All planned activities will be in compliance with the National Historic Preservation Act and the Council on Historic Preservation Act. All determinations and documentation will be in accordance with the terms of the Programmatic Agreement, as amended, effective September 23, 2002.

The activities supported by this grant for this project statement do not involve any other federal compliance issue.

Literature Cited:

520 ILCS 10/11. Illinois Endangered Species Protection Act (1972 et seq.).

Gee, J.P. 1999. An Introduction to Discourse Analysis: Theory and Method. Rutledge, London.

ILL. ADM. CODE. Conservation § 1075: Consultation Procedures for Assessing Impacts of Agency Actions on Endangered and Threatened Species and Natural Areas (1990 et seq.).

ILL. ADM. CODE. Conservation § 1080: Incidental Taking of Endangered and Threatened Species (2001).

State of Illinois 2005. The Illinois Comprehensive Wildlife Conservation Plan & Strategy. Version 1.0. Illinois Department of Natural Resources, Springfield, IL.

Strauss A.L., and J.M. Corbin. 1998. Basics of qualitative research: techniques and procedures for developing grounded theory, 2nd edition. Sage, Newbury Park, CA.

Wisconsin Department of Natural Resources. 2014. Wisconsin Barn Owl Species Guidance. *Bureau of Natural Heritage Conservation, Wisconsin Department of Natural Resources, Madison, Wisconsin. PUB-ER-701.* Accessed online on May 22, 2014. <http://dnr.wi.gov/files/PDF/pubs/er/ER0701.pdf>